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903 Pad Interim Measure/Interim Remedial Action Comments

T. G. Hedahl, Director Environmental Restoration/Waste Management & Integrating Operations Kaiser-Hill Company, L.L.C.

Attached are the Department of Energy (DOE) comments on the Draft Operable Unit (OU) 2 - 9 Pad and Windblown Soils Interim Measure/Interim Remedial Action Decision Document. Plearespond to the comments and forward the responses for resolution. Upon successful resolution with DOE comments, the revised document will be forwarded to the Regulatory Agencies for further review.

This response is not intended to change the current scope, cost, or schedule for the Contracto additional information or coordination, please contact me at extension 5669.

David George Program Manager

Environmental Programs

Attachment

cc: w/o Attachment J. Wienand, EP, RFFO S. Tower, EP, RFFO D. George, EP, RFFO Admin Record

> DOCUMENT CLASSIFICATION REVIEW WAIVER PER CLASSIFICATION OFFICE

CORRES. CONTROL X X
ADMN RECORD/080 X X
PATS/T130G X X

Reviewed for Addressee Corres. Control RFP

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DOE ORDER # 5400 . /

COMMENTS ON THE DRAFT, IM/IRA FOR THE 903 PAD AND WINDBLOWN SOILS FOR OPERABLE UNIT NO. 2 October 1995

General

- 1. The document presents two different philosophical approaches regarding whether or not the action is a final action (see pp. ii, II-19) or the action is intended to "...expedite the final remediation of these IHSSs..." (see p. i, 2nd par., p. I-3, first par.). A final action and an interim removal are two very different actions. Please explain.
- 2. The document in its justification of the IM/IRA action jumps back and forth using HHRA numbers based on exposure to all media as evidence of exposure from surface soils. This type of technical argument is not sufficient justification to perform surface soil excavation, especially when total risks from all media are presented. The risks due to surface soils should be presented to technically justify the action.
- 3. The IM/IRA relies on the technology screen performed in Technical Memorandum No. 2 which is a draft final document and has not been approved by DOE, EPA, or CDPHE. The assumption that the technology screening and the technologies presented are acceptable to the agencies are problematic in KH's planning assumptions. Please explain.
- 4. KH has not committed to providing a report detailing the action after the action is complete. At a minimum, KH should commit to providing the regulators and the public with documentation of the success of this action, especially if the action is to be considered a final remedy. Please add development of a final report as part of the IM/IRA.
- 5. Explain why DOE, EPA, CDPHE, and the public should "buy into" the project risk presented by KH by relying on an operational Site-wide Waste Management Facility for disposal of excavated soils. What guarantee does the public have that the risks have simply not just been transferred to roll off bins. Also, as stated in Appendix C the construction of the onsite disposal cell relies on the approval of a CAMU by the regulators. CDPHE has repeatedly stated that they will not allow a CAMU at RFETS. Please explain how KH will deal with this problem and what are the management risks DOE is accepting by proceeding with this IM/IRA.
- 6. Please explain why DOE is paying a tipping fee to KH for onsite disposal! DOE will not pay KH to transport material from the 903 Pad and put it into an onsite disposal cell which DOE is paying for in the first place. This is not acceptable to DOE. Correct the document.

Specific

Executive Summary

7. p. i, 2nd bullet: Explain how KH has reasoned that this action is compatible with the final Record-of-Decision (ROD) for OU 2. This action may not even be necessary if KH were not pushing this as a Performance Measure.

- 8. p. ii, 1st par., last sen.: Please state here what the 15 mrem annual radiation dose is equivalent to in pCi/gm.
- 9. p. ii, 2nd par., last sen.: Please cite where DOE has stated that DOE has a "...goal of centrally locating contaminated media in a controlled and monitored site-wide waste management facility."

Part I. Declaration

- 10. p. I-1, 3rd par., 3rd sen.: The Response to Comments for the Phase II RFI/RI Report for OU 2 stated that the rainfall event of May 17, 1995 was a 20 year, not a 15 year, storm event. Please correct.
- 11. p. I-1, 5th sen.: The statement "...(RADs were) ...apparently transported them down the hillside..." appears to be in error. When examining Figure I.5-2 how can the conclusion be made that transport did or did not occur. Downgradient sampling locations did not show elevated concentrations of Pu/Am and KH does not present any baseline data to show pre-rainfall concentrations to support this statement. Please delete this statement or back it up with additional data.
- 12. p. I-2, 1st par., 1st sen.: Please correct all the citations, including the reference section, to Technical Memorandum No. 2 to clarify that it is only a draft final version and never approved by EPA and CDPHE.
- 13. p. I-2, 7th bullet: Explain what the "...final, long-term remedy for OU 2..." is.
- 14. p. I-2, last bullet: Delete this bullet. This is always an objective for any DOE site.
- 15. p. I-2, last par., last sen.: For the close-out of IHSS 183 explain how the subsurface soils will be remediated/addressed in this IM/IRA. Also, explain what the KH strategy is for the cleanup of surface soils associated with IHSS 140, Reactive Metal Destruction Site. According to Table I.1-1, the surface soils at IHSS 140 are not being addressed under this IM/IRA or mentioned in the close out of the IHSSs. This is not an efficient way to handle DOE funds. Finally, if surface soils from IHSSs 216.3 and 216.2 are delisted under this IM/IRA, explain when the subsurface soils and groundwater at these IHSSs will be addressed.
- 16. p. I-3, 1st par., last sen.: Explain rationale as to why other IHSSs that have surface soil contamination are not being dealt with under this IM/IRA. Also, the surface soils of OU 1 have not been addressed in this IM/IRA (only one brief statement on p. I-9). OU 1 soils were administratively transferred into OU 2, to be addressed in the CMS/FS. Please add an information/analysis of OU 1 surface soil contamination to this document since it represents the final remedy for surface soils in this area.
- 17. p. I-3, 3rd and 4th par.: Delete. This is not germane to the document.
- 18. p. I-3, 5th par., 1st sen, parenthetical note: Since KH is making it clear that funding is tight, has KH explored the possibility of performing this work in a phased approach to allow for adequate funds? If not, then delete this statement.
- 19. p. I-6, 2nd par., last sen.: After the term "...addresses the..." suggest adding the words "...a limited area of..."
- 20. p. I-9, bullet list: Suggest adding IHSS 140 to this list.

- 21. p. I-9, 4th par.: Please address how/when subsurface soils at IHSS 183 will be remediated.
- 22. p. I-10, 2nd and 3rd par.: Uncertain why this discussion is presented here. Expand the discussion to explain why these paragraphs are important to the 903 Pad IM/IRA.
- 23. Sec. I.5.1, p. I-11 1st par., 1st sen.: Figure I.5-1 does not show all of the 800 acres of OU 2 or all of the surface soil sampling results available. Please correct as appropriate.
- 24. Table I.5-1: This table presents water quality parameters and the semi-volatile results twice. These results are supposed to be for surface soil samples, why are there water quality parameters presented. Please correct.
- 25. Sec. I.5.2: Explain why this information is presented in a surface soil IM/IRA. This section presents data regarding surface water samples without an adequate logical connection to the remediation of surface soils. Also, provide some technical analysis of what the data mean regarding transport of actinides to surface waters. Are the data presented in Figure I.5-2 dissolved or total? What quality level are the data and are the data validated?
- 26. p. I-17, Sec. I.5.4.1, 1st and 2nd par.: Explain why KH is using the HHRA results of AOC 1, which present risk exposure from all media, to justify no further action in a surface soil IM/IRA. If, as the argument is presented here, there are no risks to human health from the 903 pad soils then KH must provide DOE with sufficient rationale to justify performing this action in the first place. This section's argument is confusing in its presentation.
- 27. p. I-19, 1st par., 1st sen.: Change 100 mrem to 15 mrem since the DOE document is currently being changed.
- 28. p. I-19, last par., last sen. and Sec. I.5.5.1, 1st par., 6th sen.: Please explain to DOE, EPA, CDPHE and the public the re-definition of the Industrial Area by showing the boundary of the newly defined Industrial Area on a figure and include it in this document. It is unclear what areas, as referred to in this document, are "...inside the industrial area of RFETS..." and "...outside of the industrial area."
- 29. p. I-22, sec. I.6: Provide analysis in this section of how the surface water data presented in Figure I.5-2 are involved in the decision to remediate certain areas of surface soils.
- 30. p. I-22, sec I.6, 2nd sen., Figure I.6-1: Explain why three sampling areas, as presented on Figure I.5-1, to the east and southeast of IHSS 155 (Lip area) that have Pu and/or Am activity levels that exceed the office worker remediation goals (i.e., Pu = 1640 pCi/gm and Am = 142 pCi/gm, from Table I.5-3) are not included in the areas to be remediated. The first sampling area has a Am value of 164.10 pCi/gm, the second has a Pu value of 7300 pCi/gm, and the third area has a Pu value of 5700 pCi/gm.
- 31. p. I-22, sec I.6, 3rd par.: Provide the surface soil sampling results and analysis of those results that demonstrate the necessity of remediating the 903 Pad surface soils to a depth of 40 cm below the asphalt pad. No data are presented in the document to technically justify this action to EPA, CDPHE, or the public.
- 32. p. I-22, sec. I.6, 3rd par.: Please explain what will be done with the asphalt from the 903 pad.
- 33. p. I-22 and I-23, sec. I.7, bullet list: These bullet items appear to be more a wish list than planning assumptions. For example, the 5th, 6th, and 9th bullets are not assumptions. Either the data results exceed remediation goals or not and the building will or will not be removed. Please

- correct as appropriate. For the 8th bullet show the area on a figure referred to as the area "...within the industrial area fence..."
- 34. p. II-1, sec. II.1.1, 1st par., 2nd sen.: Define to EPA, CDPHE and the public what is Task 3 of the CMS/FS, this means nothing as presented.
- 35. p. II-3, 9th bullet, 2nd sen.: Explain why costs for a horizontal barrier is relevant for OU 2.
- 36. p. II-4, 1st bullet, 1st sen.: If costs are plus or minus 100% the cost estimate is not very valuable for anything but relative cost comparison. Provide a better accuracy on the cost estimates.
- 37. p. II-14, sec. II.2.4.2, 3rd par.: Expand this discussion. As presented, the paragraph is hard to understand what the point of the discussion is.
- 38. p. II-19, sec. II.3, 1st par., 2nd sen.: See General Comment No. 1.
- 39. p. II-27, Table II.4-1, asterisk comment and cost assumptions, App. C, Excavation and Disposal: Please explain why DOE is paying a tipping fee to KH for onsite disposal! This is not acceptable to DOE.
- 40. p. II-27, Table II.4-1, Excavation and Onsite Disposal, Annual O&M: Explain why there will be no O&M costs when the other alternatives cost items for periodic inspections and repairs of any erosional damage, post-excavation monitoring, etc.
- 41. p. II-31, sec. II.4.1.4.5, 2nd par., 2nd par.: Please explain what is meant by the statement "The indirect impact from the excavation and disposal alternative includes POSITIVE impacts to the plants and animals living in the 903 Pad and Windblown Soils Area..." What are the positive impacts to plants when they are excavated or to animals when their habitat is destroyed?
- 42. p. II-32, 1st par., 2nd sen.: Explain what the costs will be for temporary storage of low-level waste in containers until the onsite disposal facility is ready. State whether or not these costs are considered in the cost estimate and under what category (i.e., O&M, capital, etc.).
- 43. p. II-43, 2nd bullet: Explain where KH expects dewatering operations to be necessary for this surface soil remediation. Explain what ground water will be impacted during this remedial action.
- 44. p. II-43 and II-44, Sec. II.5.2: This Implementation Plan is inadequate in detail to properly evaluate the action. Provide more detail.
- 45. p. II-43 and II-44, Sec. II.5.2, 2nd bullet: KH appears to be stating here that excavation will be in a "hot spot" manner of operation rather than a total area removal. Hotspot removal contradicts the entire action presented in the document. Please correct as appropriate.

Appendix C

46. Costing assumptions under Onsite Disposal: The construction of the onsite disposal cell relies on the approval of a CAMU. CDPHE has repeatedly stated that they will not allow a CAMU at RFETS. Please explain how KH will deal with this problem and what are the management risks DOE is accepting by proceeding with this IM/IRA.

Subject:

Comments on Draft Interim Measure/Interim Remedial Action Decision Document dated October 1995

I performed a cursory review of the above-named document, from a regulatory compliance perspective. Although I concur with many of Eric Dille's comments, I did not reiterate them here.

Comment 1. On page I-6, Section I.3.1 refers to several chemicals which meet the RCRA definition of listed hazardous waste. Since none of these are evidently detected in the sampling results for surface soil, they are not identified as COCs. However, there should be an explanation as to why the surface soil is not considered RCRA hazardous by the contained-in policy. Non-detects are sufficient for the required explanation, but it definitely needs to be included.

Comment 2. On page II-35, Section II.4.2.1, top of page, states that the ranking of the alternatives was, from highest to lowest, excavation and disposal, ex situ stabilization, enhanced vegetative cover, and no further action. According to the document's grading tables, the ranking should be, from highest to lowest, excavation and disposal, enhanced vegetative cover, ex situ stabilization, and no further action. In addition, the grading of these alternatives appeared to be very subjective. No impacts were noted for the O&M of an onsite disposal cell.

Date:

October 25, 1995

Subject:

Comments on Draft Interim Measure/Interim Remedial Action Decision

Document dated October 1995

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